blunt, always more or less eroded; there are about four whorls in the adult with indications of about five resting stages; the surface is smooth except for inconspicuous lines of growth; the young are somewhat naticoid, with a small umbilicus, but this shape rapidly changes; the whorls enlarge rapidly, being as it were appressed toward the suture which is distinct but not channeled, while the umbilicus becomes relatively larger and more or less funicular; the aperture is egg-ovate, entire, the posterior commissure solidly filled with callus, the outer lip internally thickened, patulous not reflected; the inner thickened, continuous over the body; height of shell 33; of last whorl 31; of aperture 23; maximum diameter (in front of the middle of the whorl) 26 mm. U. S. Nat. Mus. Cat. No. 332780.

Habitat. Rio Uruguay, Department of Paysandu.

The operculum is horny, concentric, with the nucleus at the inner third; the radula is typically Ampullarioid and might be quite accurately represented by Troschel's figure of the radula of *A. urceus*, in the "Gebiss der Schnecken."

The literature has been carefully searched, both on the lines of *Ampullaria* and *Campeloma*, but nothing of the sort has been discovered.

The subgenus is named in honor of Doctor Florentino Felippone, whose energy and interest in exploring the fauna of Uruguay are deserving of great praise.

The peculiar form of this species, and its funicular umbilicus, so different from that of any other in the genus, seem to authorize its separation.

A NEW SPECIES OF PHYSA FROM NEW YORK STATE.

BY FRANK C. BAKER.

PHYSA ONEIDA n. sp. Shell of medium size, ovate, slightly inflated; whorls about five, slowly increasing in diameter; spire short, broad, the whorls flattened; color yellowish-horn; surface smooth and shining, with rarely a trace of spiral striae, but the

lines of growth may form more or less marked raised lines in some specimens; sutures slightly impressed, bordered below by a wide white band; protoconch smooth, rounded, rich wine color; aperture long-ovate, twice the length of the spire; peristome bordered within by a thickened rib edged with dark brown; columella thickened, slightly twisted; parietal wall covered by a thin callus which is folded over into and completely closing the umbilical region.

Length, 11.0; width, 7.5; aperture length, 8.0: width, 3.5 mm. Type.

Length, 13; width, 8.5; aperture length, 10.5 mm. Paratype.

Length, 10.5; width, 7.2; aperture length, 7.5; width, 3.7 mm. Paratype.

Length, 15.0; width, 9.0; aperture length, 11.0; width, 5.0 mm. Paratype.

This Physa has been included under *warreniana* Lea by the writer for a number of years. It is a small edition of that species agreeing in outline with Lea's figure and description in all essential details except size (see Lea's Observations, xi, p. 120, pl. 24, fig. 81). Lea's species, however, differs not only in size but has strong spiral lines on the surface which are absent in *oneida*. The shell in the smaller species is also more swollen and less cylindrical, and the spire is more depressed than in *warreniana*. It resembles *ancillaria* and has been constantly associated by the writer with that species as a variety. The shell is not as broad as *ancillaria* and the whorls are not shouldered. It perhaps more nearly resembles Walker's *ancillaria crassa*, but differs constantly in being less solid, lacking the variceal bands, the body whorl is less swollen, the columella is not as heavy, the spire is higher, the outer lip is not as much arched, and the aperture is more elongate. The color of *crassa* is purplish-white with an opaque texture while *oneida* is yellowish-horn, polished, with a translucent texture. *Heterostropha* has a longer, more acute spire, a rounder aperture, somewhat shouldered whorls, and a more twisted columella. There is some variation in *oneida* in the height of the spire, immature specimens having a somewhat longer spire than mature

shells. The surface is usually destitute of spiral sculpture, only a few faint impressions being observable in rare specimens. One individual, however, had been injured when the body whorl was about half completed and the part of the shell succeeding the injured portion is very heavily impressed with spiral lines, while the rest of the shell is perfectly smooth.

This shell was first recorded from Tomahawk Lake, Wisconsin, as *Physa ancillaria warreniana*. The same form occurs in Lake Maxinkuckee, Indiana, on the shore of Lake Michigan at Chicago, and a somewhat similar form has been received from Georgian Bay, Canada. It is the most abundant mollusk in Oneida Lake where it occurs on a wave-beaten shore. It is probably widely distributed, and will be found in collections labeled *ancillaria* and *heterostropha*. Specimens that have survived a second year and are of large size compare favorably with *warreniana* but may at once be separated by the absence of spiral sculpture which is especially strong in shells of Lea's species from South Dakota and other western states.

The bibliography of the new species is as follows:

1902. *Physa heterostropha* Baker (non Say). Moll. Chicago Area, Part II, p. 308, pl. 34, fig. 2 (part). Lake Michigan.

1911. *Physa ancillaria warreniana* Baker (non Lea). Trans. Wis. Acad. Arts, Sci. and Letters, XVII, p. 234. Tomahawk Lake, Wis.

1916. *Physa ancillaria warreniana.* NAUTILUS, XXX, p. 8. Oneida Lake, N. Y.

1916. *Physa ancillaria warreniana.* Tech. Pub., N. Y. State Coll. For., Syracuse Univ., No. 4, p. 273, *et seq.*, Fig. 45, nos. 34, 35. Oneida Lake.

1918. *Physa warreniana.* NAUTILUS, XXXI, p. 89. Oneida Lake.

1918. *Physa warreniana.* Tech. Pub., N. Y. State Coll. Forestry, No. 9, p. 173, *et seq.* Oneida Lake.